

Functional MRI (fMRI):\*\* One of the most significant advantages of MRI is its ability to perform\*\* . 1 : functional imaging, known as fMRI. This capability enables comprehensive evaluation of brain anatomy from various perspectives, enhancing the detection of abnormalities and improving surgical planning.\*\*Multi-Planar Imaging:\*\* MRI allows for imaging in multiple planes (sagittal, coronal, and axial) without repositioning the patient. Neurosurgeons rely on MRI's multi-planar images to precisely .locate and navigate around critical structures during procedures.2.3